

Attachments: Replacement Sheets 1, 2 , **Figures 1,2 and 3**;
Annotated Sheets showing changes.

REMARKS

This is a response to the Office Action dated January 13, 2005.

In the outstanding Office Action, the Examiner objected to Claims 3, 5, and 10 as being in improper dependent form. All pending claims, *i.e.*, Claims 1-10 and 21-22, were rejected under 35 U.S.C. §112, first paragraph as not satisfying the written description requirement. The Claims were also rejected under §112, second paragraph as indefinite. The Examiner rejected Claims 1, 2, 4 and 7-9 under §102(b) as being anticipated by United States Patent No. 5,950,863 to *Schutz et al* ("*Schutz*"). Claims 1-5 and 7-10 were also rejected under §102/§103 as being anticipated by, or obvious in light of *Schutz*. Claims 1-10 and 21-22 were rejected under § 102 as being anticipated by United States Patent No. 6,003,723 to *Morand* ("*Morand*"). Claims 1-8, 21 and 22 were rejected under §103 as being unpatentable over United States Patent No. 5,957,324 to *Gettelman et al.* ("*Gettelman*") in view of a *Borbrick* 363 model towel dispenser located in the USPTO ("*Borbrick model*"). Finally, all claims were rejected under § 103 as being unpatentable over United States Patent No. 5,322,186 to *Frazier et al.* ("*Frazier*") in view of *Morand*.

As amended, this application is believed in condition for allowance. The added language to Claims 1 and 21 is supported by the application as filed, notably by **Figures 2 and 4** and the text at page 5, first full paragraph. The amendments are believed to attend to all of the §112 issues as well as distinguish the art of record. In this respect, it is noted that none of the art suggests an adapter plate for a towel dispenser containing towels of length, **L**, for shortening the aperture to a length of 80-90% of **L**.

In accordance with the invention, an adapter plate is secured to the bottom portion of the dispenser and operates to abridge the length of the dispensing aperture to between about 80 and about 90 percent of the transverse length of the towel. The adapter operates to promote dispensing of towels, while virtually eliminating multiple towel dispensing or "fall through." This is achieved by abridging the dispensing slot of the dispenser as can be seen from **Figure 2:**

FIG. 2

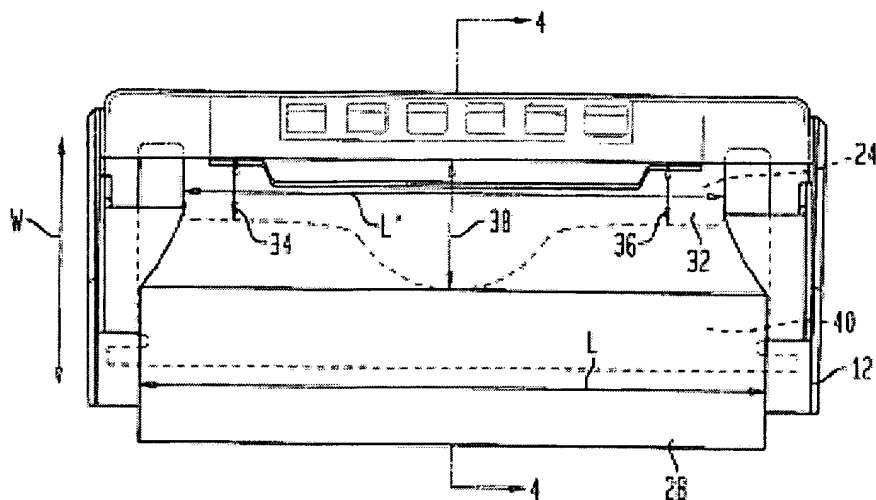


Figure 2 is a bottom view of a towel dispenser configured with an adapter plate in accordance with the present invention. The towel dispenser defines an elongate bottom dispensing aperture 24 through which a towel 28 passes upon dispensing. The towel 28 has a transverse length, L , and the dispensing aperture has a length of L or greater. The claimed invention operates to abridge the length of the dispensing aperture to a length, L' , of from about 80 to 90 % of the transverse length, L , of the towel. One embodiment of the adapter plate, which is encompassed by Claim 2, can be further illustrated by **Figures 5 and 6**:

FIG. 5

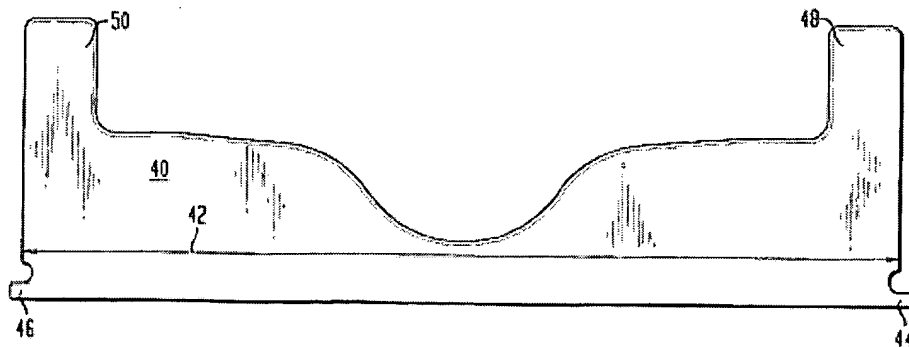
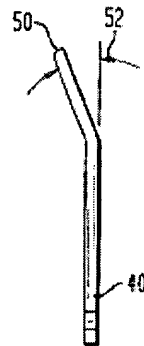


FIG. 6

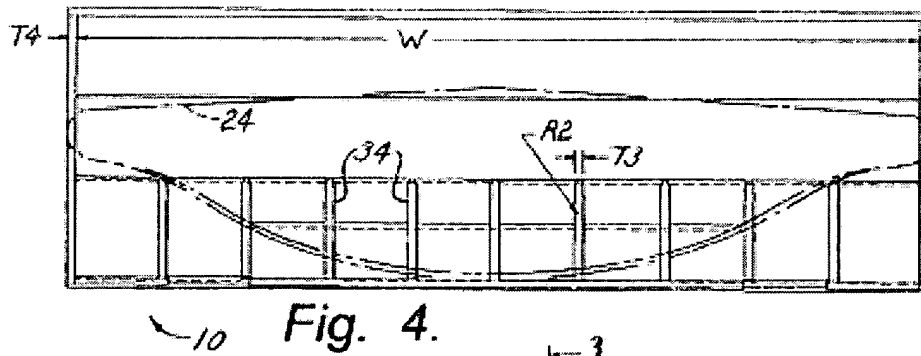
In this embodiment, the plate **40** is an elongate member with a generally planar mid portion and further has two terminal portions **48, 50** projecting outwardly and upwardly with respect to the planar portion at an angle of inclination **52**. The terminal portions operate to abridge the length of the dispensing aperture when the plate is mounted in the bottom portion of the dispenser.

The inventive modified dispenser has remarkably improved dispensing properties over the dispensers of the prior art because dispensing problems of the prior art are virtually eliminated. For example, a common prior art problem occurs where more than one towel comes out of the dispenser in a dispensing attempt. Another common problem of prior art dispenser is where a clump of towels fall out of the dispenser during a dispensing attempt. In both instances, paper is wasted. The present invention achieves a remarkably low rate of dispensing problems as is evidenced by Examples 446-2160 of the pending application. For example, when a dispenser was fitted with the inventive adapter plate with towels in the "tail backward" configuration, there were no occurrences of more than one towel coming out of the dispenser out of 610 attempts. There were also no occurrences of any towels falling out through the dispensing aperture. In contrast, when the dispenser was tested without the adapter plate, more than one towel came out at a rate of 1.85% and towels fell out of the dispenser at a rate of 15.74%. And, when a dispenser fitted with a prior art adapter (as shown in **Figure 3** of the pending application) was tested, more than one towel was dispensed at a rate of 1.35 % and towels fell out at a rate of

11.91 %. Thus, the claimed invention achieves superior results *even when compared to dispensing adapters in the prior art.*

The claimed invention is believed patentable over the prior art because none of the references, either alone or in combination, disclose, teach or suggest an adapter plate which is configured to abridge the length of the dispensing aperture to a length of from about 80 to 90 percent of the transverse length of the towel in the dispenser.

Turning first to the §102 rejections, the Examiner rejected the claims as being unpatentable over *Schutz*. *Schutz* does not anticipate the claims because it does not disclose several features of the claimed invention. Most importantly the dispenser insert disclosed in *Schutz* does not operate to abridge the length of the dispenser such that the abridged length is from about 80-90% of the transverse length of the towels. **Figure 4** of *Schutz*, reproduced below, is a top view of the adapter insert positioned within a dispenser.



As is clear from the *Schutz* disclosure, in particular **Figures 1, 4, and 10** the *Schutz* insert operates to restrict the width of a dispensing aperture, not its length. Moreover, there is no disclosure in *Schutz* that states how much the aperture is abridged along the width, if at all. Notice here, that in the experimental tests disclosed in *Schutz*, the length of the dispensing aperture after the insert was placed in the dispenser was 10.3 inches. (col. 5, lines 27-31). The paper used in the tests was only 9.38 inches long. (col. 6, lines 1-6). This means that *Schutz* reference specifically discloses an aperture that is approximately 110 % of the transverse length of the towel. And, in a preferred embodiment of *Schutz*, the dispensing aperture was 9.721

inches when the insert was placed in a dispenser. (col. 8, lines 13-15). Thus, in the preferred embodiment of *Schutz*, the aperture would have a length that is approximately 103.5 % of the length of the dispensed towel. Both values are clearly outside the claimed range.

Further features claimed in the pending application are also never disclosed or suggested by *Schutz*. For example, Claim 2 recites that the adapter plate is an elongate member having a pair of *terminal* portions that extend upwardly and outwardly with respect to the planar medial portion *at the end* of the adapter plate. The *Schutz* disclosure does not disclose structure that is even remotely similar to the structure recited in Claim 2. The Examiner seems to note that the funnel member in *Schutz* (item 48) discloses the structure of the adapter plate. As stated in the disclosure, the funnel member of *Schutz* includes the rib portion (14), the side portions (16), the ledge portion (18) and a rear portion (54). The combination of these four surfaces resembles a box structure more than it does a plate. Also, even the individual components of the funnel member do not appear to have structure where a pair of terminal portions on the end of the plate extend upwardly and outwardly from a planar medial portion. The elements of claim 4 are similarly not disclosed which recite that the terminal portions have an angle of inclination of about 10 to about 30 degrees. On this point, the Examiner appears to note that the angle θ in *Schutz* discloses the elements of Claim 4. The angle θ discloses the angle at which the rib portion (14) inclines. Here again it is clear from **Figs. 1-3** that the rib portion of *Schutz* is not similar to the claimed structure, *i.e.*, a pair of terminal portions which extend from each end of an adapter plate.

The elements of Claims 7-9 are likewise not disclosed, taught or suggested by *Schutz*. Indeed, *Schutz* teaches away from the elements recited in these Claims. Claims 7-9 state generally that the adapter plate is configured to define a central enlarged portion of the dispensing aperture and two restricted terminal portions. The adapter employed by *Schutz* on the other hand, operates to restrict the opening of a dispenser which has an enlarged center portion. As stated by *Schutz* in column 1, lines 38-41, the adapter is inserted into a dispenser unit which already has an enlarged central portion. And, as is clear from **Figure 4** of *Schutz*, the adapter is configured to abridge the *width* of the aperture such that the span of the central portion of the aperture is substantially diminished while the terminal spans are largely unmodified.

objectives, which is to prevent soaking the entire towel stack when the area is cleaned. As stated in col. 5:

The dispenser **10**, in addition to providing improved feeding of towel sheets from large stacks thereof, also facilitates maintenance of installations being cleaned by streams of water. This is because the shelf members **32** produce separation of the sheets **25** above the feed slot **24** as described above, in that water that gets on the lip extremities **26** of the funnel portion **20** has only limited wicking into the stack **23**. This is particularly true if care is taken to insure

It is evident that the shelves in the slot are vertically high enough in the dispenser that they do not partially block or abridge the aperture as required by Claims 1 and 21. **Figure 2** of *Morand* shows that the actual dispensing slot **24** extends the entire length of the body of the dispenser which is longer than the towel length (*see Figure 3*). Thus, the aperture could not have a length of from about 80 to about 90 percent of the length of the sheet, as recited in Claims 1 and 21. *See also* col. 3, lines 58-59 of *Morand*. Indeed, the aperture disclosed by *Morand* is designed to be larger than the towel length. The prototype disclosed in *Morand* has a length of 9.75 inches and holds towels which have a transverse length of 9.59 inches. Again, this is well outside of the range recited in Claims 1 and 21.

Morand also fails to disclose the elements of the other claims. For example, *Morand* does not disclose or suggest the elements of Claim 2 reciting that the adapter plate is an elongate member with a planar medial portion with a pair of upwardly inclined terminal portions at each end. On this point, the Examiner cited item **20**, the funnel portion in **Figures 1** and **7** as disclosing an adapter plate. Here again, the structure disclosed by the reference does not disclose, teach or suggest the structure recited in Claim 2. Item **20**, is described in *Morand* as the funnel portion is comprised of funnel walls (**20A** and **20B**), and side walls (**18**). Once again, the funnel portion of *Morand* does not remotely suggest the structure of the adapter plate as recited in Claim 2. Neither the funnel portion or its individual components appear to have a plate which is an elongate member having a planar middle portion and a pair of upwardly and outwardly

projecting end portions. Similarly, the angles of inclination as recited in Claims 4 and 5 are not disclosed by *Morand*. The portion of the specification cited by the Examiner gives the side angle of the shelf members to be approximately 45°, also corresponding to an angle of inclination of 45°. Aside from the fact that the shelf members are not terminal portions of an adapter plate, the angle of 45° is well outside the range recited by Claim 4, and is not near the angle recited by Claim 5. Finally, *Morand* does not disclose that the plate be pivotally secured to the towel dispenser as recited in Claims 6 and 22. As shown in **Figure 7** of *Morand*, and discussed in col. 6, lines 50+, the funnel member is secured by a pair of tabs **54** that project into respective tab cavities **56** for “snap engagement” with the cavities. After the funnel member is tab-fastened it is further “rigidly secured” to a wall surface with wall fasteners. (col. 6, lines 56-60). The funnel in *Morand*, connected as such, is, therefore, clearly not pivotally connected to the dispenser.

Regarding the §103 rejections, the Examiner rejected Claims 1-8 and 21-22 as being unpatentable over *Gettleman* in view of a towel dispenser in the PTO. As an initial matter, Applicant submits that the Office’s dispenser is not a proper reference for numerous reasons. First, in order to be prior art, the dispenser must have existed before the priority date of December 11, 2000. The Examiner has not established that the dispenser existed in its current form as of that date. In this regard, the copyright date on the loading instructions do not establish that the aperture on a lower part of the dispenser existed in its current form before 2000. That part of the device may have been changed or modified at any time. The Examiner has not testified that he made any measurement on any device which existed before the priority date of this application. The rejections should be withdrawn for this reason.

The rejections should also be withdrawn because the Examiner has not complied with 37 CFR §1. 104(a)(d)2 which provides:

(2) When a rejection in an application is based on facts within the personal knowledge of an employee of the Office, the data shall be as specific as possible, and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons.

Counsel cannot tell from the obscured photographs provided the length of the dispensing opening, nor can Applicant determine the length of towel placed therein. Other indistinguishable features include whether there are inclined terminal portions, what the angle of inclination is, the shape of the aperture, etc.

Applicant respectfully requests that the rejections based on the PTO *Borbrick Model* be withdrawn, or, a detailed affidavit be provided with all relevant dimensions clearly labeled; this affidavit should also necessarily include relevant dates prior to December, 2000 when the dimensions were observed.

Notwithstanding the unavailability of the *Borbrick model* as a reference, the rejection lacks basis because *Gettelman* does not disclose, teach or suggest certain elements of the claims at issue. As with *Schutz*, the adapter disclosed by *Gettelman* abridges the width of the aperture, not the length as recited by Claims 1 and 21. This can be seen by **Figure 2** of *Gettelman*, where the adapter is an elongated piece and runs lengthwise of the aperture. Further claimed features are not disclosed. For example, *Gettelman* clearly does not show a guide plate that is pivotally secured as recited in Claims 6 and 22. As seen in **Figure 3** and discussed in column 2, lines 46-51 of *Gettelman*, the adapter is attached to the bottom by a pair of screws which pass through guides. As such, the adapter plate may be slidably mounted to the dispenser, but it is not pivotally mounted.

Furthermore, the notion that the PTO dispenser provides motivation to modify the adapter plate of *Gettelman* is hindsight. An adapter plate modifies a dispenser, not vice-versa.

The Examiner also rejected all pending claims under §103 as being unpatentable over *Frazier* in view of *Morand*. On this rejection, the Examiner stated: “It would have been obvious for *Frazier* to have a dispensing aperture of about 80 to 90 percent of the towel length and preferably 85% to minimize fallout and double dispensing as taught by *Morand* and come up with the instant invention.” First, *Morand*, as stated above, does not disclose, teach or suggest abridging the length of the dispensing aperture to about 80 or 90 percent. Instead, as *Morand* can be reasonably read, the dispensing chute extends from sidewall to sidewall a distance of 9.75 inches, and the towels used are 9.59 inches long. Thus, the chute is approximately 101.5% bigger than the dispensed towel. Similarly, as stated above, *Morand* does not disclose the elements of Claims 4 or 5 because it does not disclose inclined terminal portions that are formed on the end of a planar medial portion. Second, *Morand* does not teach that its towel dispensers minimize fallout and double dispensing. *Frazier* also does not disclose several claimed features. For example, the adapter plate in *Frazier* notably does not suggest any particular relationship between towel length and the dispensing length of the aperture, nor does it define an enlarged central portion of the aperture and two restricted terminal portions as recited in Claims 7 and 8. As seen in **Figure 10** of *Frazier*, the aperture is rectangular. Claims 9 and 10 of the pending application, which further define the dimensions of the terminal portions of the aperture are likewise not taught by *Frazier*.

It is clear that none of the above references discloses or teaches an adapter plate that is secured so that the length of the aperture is abridged from about 80 to about 90 percent of the towel length. The structure of the adapter plate (as recited in Claim 2) is similarly not disclosed or suggested. The adapter plate of the claimed invention is of remarkably simple construction in comparison to the cited art devices. This, however, should not render the invention obvious or otherwise unpatentable – indeed it may indicate significant advances over the complexity of prior art devices. *Sensonic Inc. v. Aerosonic Corp.*, 38 USPQ2d 1551, 1554 (Fed. Cir. 1996); *See also, In re Oetiker*, 24 USPQ2d 1443, 1446 (Fed. Cir. 1992). All claims are, therefore, believed in condition for allowance.

Even if the references, *prima facie*, suggested the claimed subject matter, the remarkable results achieved would in any event render the claimed subject matter patentable. In this respect, note the data in the application as filed, on pages 8-9, summarized below:

Configuration: Example Nos.	% occurrence dispensing more than one towel	% occurrence towels falling out	Numbers of towels on floor
Prior Art: Examples 1-445 and 1055-1599	0.9	7	163
Present Invention: Examples 446- 1055 and Examples 1600- 2160 combined	0	0.001	1

The adapter plate of the invention is nearly 100% effective in preventing towels from unintentionally falling out of the dispenser. This result is achieved by abridging the length of the dispensing aperture to 80-90 percent of the transverse length of the towels to be dispensed, as is claimed.

Turning to the §112, first paragraph rejections, Applicant has amended the independent claims so that they positively recite a dispenser which contains the towels. As such, the towel is not of an arbitrarily selected length and there is not necessarily a need for adjustable structure. In this regard, it is noted that an adjustable structure for the dispenser is not claimed. Rather, the amount of dispensing aperture abridgement that is accomplished by the adapter plate is claimed. As such, all claims are believed to clearly comply with the written description requirement.

Regarding the §112, second paragraph rejections, the Examiner rejected the claims as indefinite for the following reasons: (1) the term “about” is indefinite because no tolerances are listed; (2) the claims premise the dimensions of the slot upon a variable-width of the towel; (3) the term “or” is unclear as to whether it is claiming alternate embodiments or a device capable of reconfiguration; and (4) that it is ambiguous as to whether the claims encompass a stand alone adapter plate or an adapter plate while in a dispenser. The phrase “about” is sufficiently definite

to apprise one of skill in the art what the applicant regards as its invention. Generally, the phrase “about” is considered to be “clear but flexible and is deemed to be similar in meaning to terms such as ‘approximately’ or ‘nearly.’” *Ex parte Eastwood, Brindle, and Kolb*, 163 USPQ 316, 317 (B.P.A.I. 1969); *See also, BJ Services Co. v. Halliburton Energy Services Inc.*, 67 USPQ2d 1692, 1694 (Fed. Cir. 2003); *W.L. Gore & Associates, Inc. v. Garlock*, 220 USPQ 303 (Fed. Cir. 1983). Applicant further notes on this point that two of the cited references contain similar claim language. (*Morand* at Claim 1, item (b); *Schutz* at claim 4). This shows that the phrase “about,” or like terminology, commonly found in issued patents in this art and that individuals skilled in the art of towel dispensers would reasonably understand the terminology.

The claims, as amended, do not premise the dimensions of the aperture upon an extrinsic unclaimed variable because the amended claims recite a dispenser housing towels with traverse length, L. The abridged aperture, therefore, has a definite length, L', which can be determined from the length of the towels.

Regarding the Examiners rejection due to alternate “or” language, the first lines of the independent claims now recite that the towel dispensers encompass those which can dispense both C-fold and interfolded towels. It states: “A modified gravity-feed towel dispenser for dispensing C-fold and interfolded towels.” Most gravity-feed towel dispensers which are capable of dispensing C-fold towels will also be capable of dispensing interfolded towels, and vice-versa. The subsequent use of the word “or” in the claim merely reflects the fact that the dispenser typically only houses and dispenses one or the other type of towel at a given time.


As amended, it is clear that Claims 1-10 contemplate a modified dispenser which is fitted with an adapter plate and Claims 21 and 22 encompass the inventive improvement to a dispenser.

As to Claims 3, 5, and 10, Applicant submits that all of the dependent claims are in proper form because they further limit the base claim. Tolerances for the ranges are unnecessary because a person of ordinary skill in the art would readily recognize that these dependent claims have smaller ranges than the base claim, thus limiting them. For example, Claim 3 recites a range for the length of “about 85 percent.” Claim 3 depends from Claim 2 which recites a range

of "about 80 to about 90 percent." Applicant submits that it would be evident to a skilled artisan that the range in Claim 3 is of different scope; all that is required.

Accordingly, all claims should be allowed.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael W. Ferrell", written in a cursive style.

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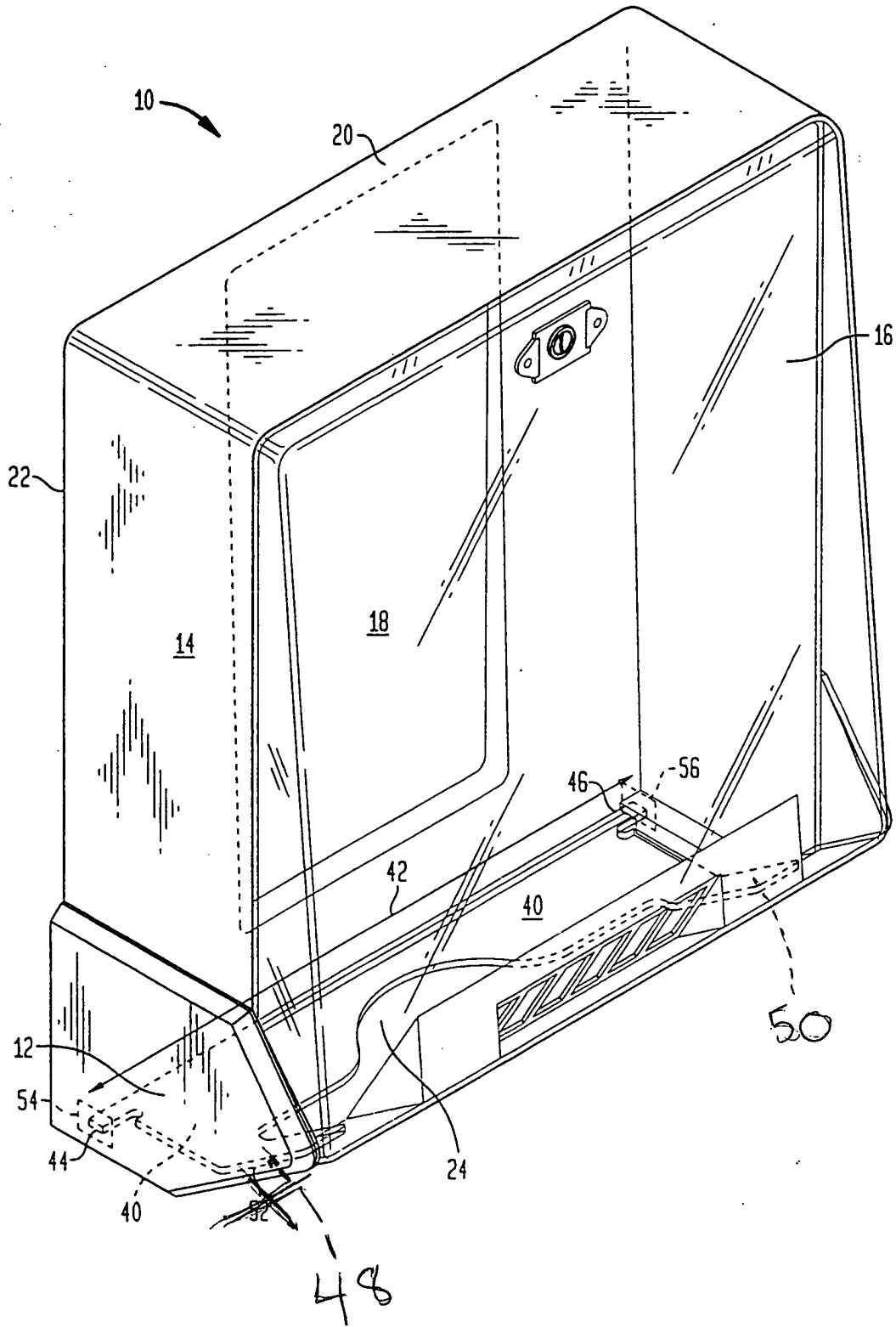




FIG. 2

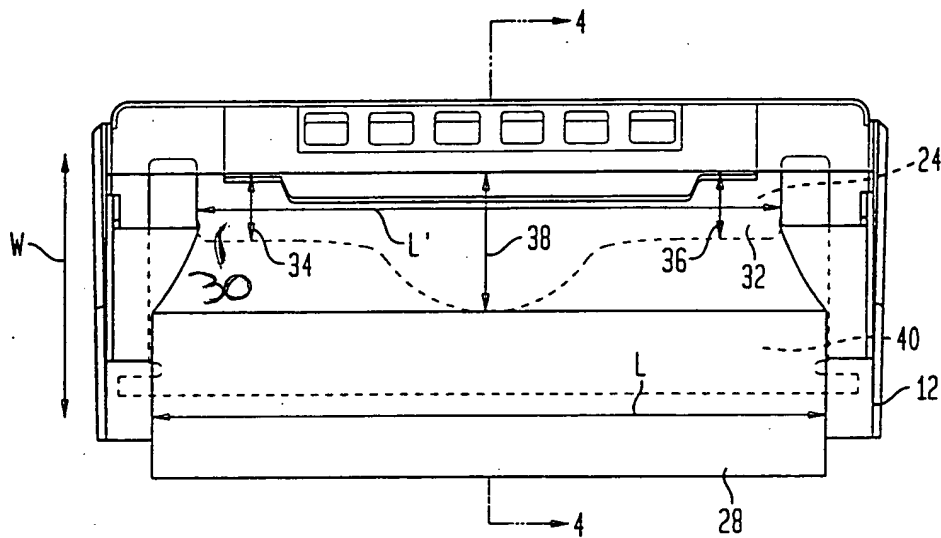


FIG. 3
(PRIOR ART)

